

ENVIRONMENTAL IMPACT STATEMENT

DRAFT

Pursuant to: Montana Environmental Policy Act  
Section 69-6504 (b) (3)

Project No. FG-10

Planting Catchable-Sized Trout in Montana Streams

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Prepared by

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## I. Purpose or Objective.

The purpose of planting catchable-sized trout in Montana streams is to provide more and easier sport fishing for the public.

## II. Description of the Program.

Commission and Department policy (see copy attached), formed through public demands and fisheries management practices, has permitted the stocking of catchable-sized trout in streams for immediate harvest. Based on public demand and available information regarding fishing pressure, makeup of existing fish populations, and angler success; Fisheries Division personnel recommend the stocking of catchable-sized trout in many streams. This is done to provide a sport fishery for more anglers than the streams would support without stocking. In some heavily fished stream sections, anglers remove enough of the natural recruitment to make fishing more difficult as the season progresses. In most Montana streams this does not occur. However, a common drop in fishing success associated with high, mid-summer temperatures is misinterpreted by many anglers as an indication of overfishing. This erroneous belief is a factor in forming the pressures we receive to continue and to expand the catchable program.

Catchables are planted for the purpose of making fishing less difficult in these waters. Since 1969, from 420,000 to 590,000 catchable-sized trout have been released annually in about 100 streams for this purpose. Due to the popularity of this program and the resultant public pressure to continue and expand it, the present level of put-and-take stocking is far higher than would be recommended by fisheries managers if they were setting the program solely for the needs of the waters or the anglers.

## III. Description of Existing Environment.

### A. Human Resources.

Human resources include anglers wanting easy, roadside fishing who benefit from and want the program, and special interest groups such as local Chambers of Commerce who believe their business will be enhanced by increased stocking. They also include anglers, usually the more skilled ones, who prefer wild fish, who do not benefit from the program, and who do not want it. The latter group essentially sees the program as consumptive of funds that could be diverted into other programs.

### B. Physiography and Geology.

Trout streams stocked with catchable-sized trout range from small to large (5 cfs to over 5,000 cfs) and are located for the most part in the mountainous regions of the state. Streambeds are primarily rocky and gravelly with some silt bottoms in lower reaches of the streams.

### C. Land Use.

Much of the land is forested and is managed for timber production and livestock grazing. The lands are public lands, managed by state and federal agencies, and private lands where public access is allowed.

D. Fish and Wildlife.

Native populations of both game and nongame fish exist in the stream sections stocked with catchables. Game fish include primarily rainbow, brown and brook trout and whitefish. Wildlife includes game and nongame birds and animals which utilize valley bottoms.

E. Vegetative Resources.

Riparian and floodplain vegetation includes grasses, sedge, shrubs and trees all of which give stability to the stream channel thus reducing erosion.

F. Climate. Not applicable.

G. Transportation Systems. Not applicable.

H. Utility Systems. Not applicable.

IV. Evaluation of Environmental Impact.

A. Environmental Impact of Proposed Action.

Catchable-sized trout are stocked to be supplemental to wild fish populations and thus provide a better catch rate than would the wild population alone. Because few catchables survive more than a few weeks beyond stocking, it has been generally accepted by most fisheries managers that the stocked fish had no effect on wild game fish populations. Recent work done on Madison River and O'Dell Creek indicates a detrimental effect on wild trout from stocking rainbows. Although total catch by numbers was increased, the total pounds caught dropped and numbers of wild fish, both in the stream and in the catch, were decreased. If these effects are adequately substantiated in the final report, and if that report withstands the criticism to which the scientific community subjects all new ideas, then the entire put-and-take stream stocking program must be critically re-evaluated. In this event there is no question that the stocking of catchables in the Madison should cease, since present Commission policy requires that no fish be planted into waters where their introduction will be detrimental. Whether the data are immediately applicable to all streams in Montana or whether similar studies on different types of streams are warranted must be decided at that time.

Increasing the fishing pressure through the stocking of catchables may disturb some species of wildlife and cause some riparian vegetation to be trampled. Since catchable stocking is confined to the more accessible, heavier used portions of the streams, such as near campgrounds, this effect from the stocking alone is relatively minor. There is a possibility that planted fish could transmit a disease to wild trout. This is quite unlikely since all lots of salmonids in Montana state and federal hatcheries are disease inspected each year prior to stocking.

B. Adverse Environmental Effects Which Cannot Be Avoided.

All known detrimental effects are discussed under A above except that stocked catchables can make it more difficult to catch wild trout because the catchables frequently bite so readily an angler cannot properly present his bait to the more, wary, wild fish. On the other hand there are reports of catchable plants making the wild fish bite more readily.

C. Alternatives.

Alternatives to planting catchable-sized trout in Montana streams are: (1) To discontinue all fish stocking in streams with thriving wild trout populations. We expect this would reduce the total man-days of fishing provided by Montana streams. It would create discontent among many anglers who have become used to the easy, instant fishing provided by catchables in the heavily stocked areas of some streams. It would please the anglers who prefer to catch wild trout. It would release some funds for other programs. (2) To stock the streams with fry and fingerlings rather than with catchable-sized fish. This was common practice for a number of years until it was found that the small fish did not carry over to succeeding years in sufficient numbers to make any effect on the harvest. Only where a natural catastrophe or rehabilitation of a drainage removed all fish or where reproduction is inadequate to supply necessary recruitment is stocking of small fish recommended. (3) To stock catchable-sized trout in only a few designated streams where a special fee would be charged for this type of fishing. This would assure those benefitting from the program would support it financially. Such a change would require legislation. (4) To greatly reduce the numbers of catchable-sized fish stocked in each stream. On the Madison test section where a reduction in wild fish coincident with stocking occurred, we were planting  $3\frac{1}{2}$  to 10 times as many catchables annually as there were wild fish in the section. Likely if planting numbers were reduced to a figure approximating the annual angler harvest there would be a greatly reduced detrimental effect on the wild fish. However, there would likely be little effect on fishing success.

D. Short-Term - Long-Term Use.

The stocking of catchable-sized trout in streams provides only a short-term use. The carryover of both stocked trout and native trout in a stream is relatively low. The stocked trout are intended only to provide a more desirable fishery for the season they are introduced.

E. Irreversible and Irretrievable Commitment of Resource.

For all practical purposes, the stocked catchable-sized trout and the dollars it costs to produce and plant them are irreversibly committed. The adverse effect on wild trout as mentioned in A above, if substantiated, is not expected to be irreversible in subsequent years. The same study that indicates the damage to wild trout indicates a steady recovery when stocking is discontinued.

#### F. Discussion of Problems and Objections by Other Agencies of the Public.

The stocking of catchable-sized trout in Montana streams has been supported by many Montana anglers. Catch per hour can be improved with stocked catchable-sized trout and it would be difficult to convince many anglers that this is not a desirable goal. There are other groups, however, who feel the stocked catchable-sized trout are of poorer quality than wild fish and that introduced strains of hatchery trout tend to genetically dilute native strains. These groups are aware that natural reproduction in many cases can adequately maintain wild fish populations and they feel the easy, instant fishing which catchables are supposed to produce should be limited to the catch-out ponds of commercial hatcheries. Although there are actually large numbers of streams in Montana that are not stocked, these are mostly smaller waters. There are few of our larger, better rivers where persons who want wild trout can fish without being bothered by either the catchables or by the anglers who fish for them. To the extent part of their license dollars must go to support a program they do not benefit from, the criticisms of these wild trout anglers is valid.

#### V. Benefits.

Benefits include provisions for more fisherman-days and better fishing success for a small portion of the inexperienced anglers using the waters stocked with catchable-sized trout. Invariably a gross inequity exists in that many license buyers support the benefits enjoyed by a few.

#### VI. A Summary Statement.

It is recognized that under Montana's relatively light fishing pressure most trout streams would provide some good fishing without any catchable stocking. The stocking of catchable-sized trout in Montana streams is a program to provide fishing in addition to what the waters would support naturally. The program has been justified as improving fishing for the less skilled anglers although recent data indicate most of the catchables, like most of the wild trout, are taken by the skillful anglers.

#### VII. A List of Mailing Distribution.

State Conservation Commission  
State Forester  
U. S. Forest Service  
U. S. Bureau of Sport Fisheries and Wildlife  
Department of Natural Resources  
Department of Planning & Economic Development  
Trout Unlimited  
Montana Wildlife Federation  
Sportsmen's Associations  
Environmental Quality Council  
Ennis Commercial Club  
Southwestern Montana Fly Fishers.

## FISH STOCKING AND MANAGEMENT POLICY

Adopted by Montana Fish and Game Commission  
May 15, 1967

### General

1. All personnel acting under the jurisdiction of the Montana Fish and Game Commission shall comply with the policy hereby established for planting fish in the State of Montana. The provisions contained herein shall supercede all others. Deviations from this policy may be made only with the approval of the Montana Fish and Game Commission.
2. The general fish distribution plan shall be reviewed annually and approved by the Chief of the Fisheries Division and the Chief Fisheries Biologist of the Montana Fish and Game Department. Changes during the year shall be made only with their written approval.
3. Planting of fish can be an effective but expensive tool of fisheries management. To insure a well-balanced fisheries program, including lake building, access, habitat preservation and improvement, lake and stream renovation, regulations and fact finding, the fish cultural program will not exceed one-third of the direct and indirect fish conservation expenditure as defined by the Sport Fishing Institute. The cost of field checks on the effectiveness of individual fish plants will be considered a fish cultural expenditure.
4. No state-raised fish shall be planted in any waters of Montana where public access is denied. Fish will not be placed in stream locations closer than one-half mile from portions of the stream where public access is denied. This shall not apply to state-owned access areas.
5. No fish will be planted into waters where their introduction will result in over-stocking or be otherwise detrimental to the fisheries of the drainage. Introduction of fish not indigenous to a particular area will be made only after careful study to insure they will be beneficial.
6. When there is a choice between species and sizes, the species and size most economical in terms of fishing quality or return to the creel will be used.
7. The planting of catchable-sized trout (7 inches and longer) for immediate harvest, is not considered resource management but a means of providing additional man-days of recreation. To insure maximum return, stream plants of catchable-sized trout will be made only between the end of spring high water and August 15 each year. Exceptions may be made for waters open entire year. The following criteria must be met in order to plant, or continue to plant a stream or lake with catchable-sized trout:
  - a. For each six fish planted there must be an increase of one fisherman day on the water stocked.
  - b. It must be established that a catchable plant will provide more days of fishing recreation than would an equal value of smaller fish.
  - c. At least 40% of the planted fish must be creeled and these must provide 25% of the game fish harvested from the water stocked. In lieu of creel checks, an increase in fishing pressure of one fisherman day for each six fish planted (as determined by the statewide creel census) will be considered satisfactory.

- d. The body of water when planted must show a significant pressure on the annual mail survey of fishing pressure.
  - e. For a new plant to be made or an existing plant to be increased, anglers must have a catch of less than  $\frac{1}{2}$  game fish per hour as determined by creel census. A "directed" warden creel census of at least 100 fisherman hours, by at least 15 different fishermen during the regular fishing season will suffice.
8. The planting of catchable-sized trout or fingerlings of any species for population manipulation, rather than immediate harvest, is considered resource management. To insure this type of planting makes a significant addition to Montana's sport fishery and does not merely replace wild stocks, the following criteria must be met:
- a. The planted fish, after growing to a desirable size for harvest, must comprise at least 10% of the water's catchable-sized game fish and must result in a significant increase in the population as determined by the best available method for assessing fish populations.
  - b. The planted fish must comprise at least 25% of the water's game fish harvest.
  - c. At least twice the weight of fish planted must be returned to the creel.
  - d. "Water" as used in items a and b above could mean a bay or other natural area of a lake or reservoir or a section of a stream.
9. The feasibility of plants of fry of any species and the feasibility of transplants of fish from one water to another will be judged by the merits of the individual project.

#### Wild Fish Streams

Judicious planting of streams will increase fishing recreation; however, the Montana Fish and Game Commission recognizes that a segment of the fishing public prefers naturally spawned fish and that wild trout from Montana streams are nationally renowned. Therefore, it is a policy of the Commission to reserve certain streams and sections of streams for wild fish. These will not be planted except to re-establish fish populations when deemed necessary after a natural or artificial disaster. The following shall be considered wild fish streams:

All streams or sections of streams in wilderness areas and streams or stream sections outside wilderness areas that are not accessible by graded roads.

Sections of State Recreational Waterways and sections of Class 1 (blue ribbon) streams on Montana's Stream-Fishery Classification Map farther than one mile from Fish and Game Department access areas or other heavily used access areas. The stream will be planted so only one-half of it will be influenced by hatchery fish.

Other streams designated by the Montana Fish and Game Commission.

### Lake, Reservoir and Pond Management and Planting

1. Maintenance plants of fish will not be made in a lake, reservoir or pond where a self-sustaining game or sport fish population is providing satisfactory fishing (rule of thumb - one-tenth pound of game or sport fish or more per hour) except where planted fish will occupy an unused niche.
2. The following procedures for lake, reservoir and pond stocking will be used provided such stocking meets with the criteria listed under General above. Preference will be given in the order listed, i.e., if (a) provides satisfactory fishing success, (b), (c) or (d) will not be used.
  - a. Introduction of game or sport fish that can maintain their populations through natural reproduction - trout or warm-water species. This includes re-establishment of fish populations following rehabilitation or natural disaster.
  - b. Periodic planting of fry that will furnish satisfactory fishing.
  - c. Periodic planting with fingerlings - trout or other game species.
  - d. Periodic planting with catchable-sized trout.